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10/589,000	11/17/2006	Nadir Arber	27627U	4539

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EXAMINER	
BORI, IBRAHIM D	
ART UNIT	PAPER NUMBER
1629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,000	ARBER ET AL.	
	Examiner	Art Unit	
	IBRAHIM D. BORI	1629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1,3-5,9-15,21,23-25 and 32* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1,3-5,9-15,21,23-25 and 32* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4 January 2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Reassignment of Application

Please note that this application has been reassigned to Examiner Ibrahim Bori, in Art Unit 1629. In order to expedite accurate processing of the application papers, all future correspondence with the office should reflect this change.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 07, 2011, has been entered.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on January 04, 2007, has been considered by the Examiner. The submission is in compliance with the provisions of 37 CFR § 1.97. Enclosed with this Office Action is a return-copy of the Form PTO-1449 with the Examiner's initials and signature indicating those references that have been considered.

Status of the Application

This Application is a 371 of PCT/IL2005/000173, filed on February 10, 2005, which claims priority to US Provisional Application No. 60/543,389, filed on February 11, 2004.

Acknowledgement is made of the Applicants' Amendment and Response filed on February 07, 2011 and November 14, 2011, which have been fully considered and entered.

Applicants' arguments against the restriction requirement of October 14, 2011, are found persuasive. Accordingly, the restriction requirement of October 14, 2011, is herewith vacated on its entirety.

Status of the Claims

The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the Instant Application.

Claims 1, 3-5, 9-15, 20-21, 23-25 and 32 were previously pending. Applicants have amended claims 1, 5, 9-15, 21, 23 and 32. Applicants have cancelled claim 20. Therefore, claims 1, 3-5, 9-15, 21, 23-25 and 32 are currently pending and are under consideration in this Office Action.

Claim Objections- Withdrawn

The objection to claim 13 under 37 CFR 1.75(c) is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 112 1st Paragraph-Withdrawn

The rejection of claims 1, 3-5, 9-15, 20, 23-25 and 32 under 35 U.S.C. 112, first paragraph is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 112 2nd Paragraph-Withdrawn

The rejection of claims 5, 9-11, 20, 14 and 15 under 35 U.S.C. 112, second paragraph is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 102- Withdrawn

The rejection of claim 12 under 35 U.S.C. 102(b) as being anticipated by Thun et al. (JNCI, 2002), is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 103- Withdrawn

The rejection of claims 1, 3, 4, 10, 12-15, 20, 21, 25 and 32 under 35 U.S.C. 103(a) as being unpatentable over Thun et al. (JNCI, 2002) and Kawamori et al. (Cancer Research Vol. 59, 597–601, February 1, 1999), is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 103- Withdrawn

The rejection of claims 1, 3-5, 9-15, 20, 21, 23-25 and 32 under 35 U.S.C. 103(a) as being unpatentable over Metaproteomics LLC WO 03/007975 A1 and Samaha et al. (Cancer Research, 1997), is withdrawn for the reason presented by the Applicants.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5, 9-15, 21, 23-25 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 12 and 32 are indefinite for reciting the phrase “curcumin analogue or derivative thereof” because one of ordinary skill in the art could not reasonably determine the meets and bounds of the phrase “curcumin analogue or derivative thereof”. It is unclear to one of ordinary skill in the art as to what chemical structure(s) are intended to be encompassed by the phrase “curcumin analogue or derivative thereof”. The phrase “curcumin analogue or derivative thereof” includes those “curcumin analogue or derivative” known and the “curcumin analogue or derivative” yet to be discovered. The specification does not make it clear exactly what “curcumin analogue or derivative” might be other than demethoxycurcumin and bisdemethoxycurcumin. One of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 3-5, 9-11, 21 and 23-25 depend from claim 1. Claims 13-15 depend from claim 12.

Claim 1 is indefinite for reciting the limitation "the same therapeutic effect". There is insufficient antecedent basis for this limitation in the claim because the Applicants have not first established "a therapeutic effect". Claims 3-5, 9-11, 21 and 23-25 depend from claim 1.

Claim 12 is indefinite for reciting the limitation "the same therapeutic effect". There is insufficient antecedent basis for this limitation in the claim because the Applicants have not first established "a therapeutic effect". Claims 13-15 depend from claim 12.

Claim Rejections - 35 USC § 102

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 12-15 and 32 are rejected under 35 U.S.C. 102(a) as being anticipated by *Apoptosis*, **2003**, 8(6), 649-654 to **Agarwal et al** (hereinafter, "**Agarwal**).

The instant invention (e.g., claim 1) is drawn to a combination therapy of either an inflammatory disease or disorder, or cancer, using:

(a) at least one NSAID (e.g., sulindac); and

(b) curcumin or an analogue of curcumin.

Method claim 12 is drawn to inhibiting the growth of cancer cells and requires dosing of the two active agents in amounts wherein therapeutic efficacy of the NSAID is achieved at otherwise lower doses due to the combination with the curcumin (i.e.,

synergy). The Examiner notes that the Applicants disclose administering the above combination therapy to inhibit the growth of HT29 colon cancer cells (see instant specification, page 20).

Agarwal teaches a method for inhibiting the growth of HT29 colon cancer cells via induction of apoptosis (programed cell death) comprising administering NSAID alone at various single doses and a combination of NSAID at a single dose with curcumin (see abstract, Figures 1-5). **Agarwal** further teaches that the combination allows lower dose of NSAID to be used. For example, NSAID alone at 75 µM dose was less effective than the NSAID alone at 100 µM dose, however, 75 µM NSAID in combination with curcumin was more effective than NSAID alone at 100 µM (see Figures 1 and 5).

Since **Agarwal** teaches a method for inhibiting the growth of HT29 colon cancer cells wherein therapeutic efficacy of the NSAID is achieved at lower dose due to the combination with the curcumin (i.e., synergy), **Agarwal** anticipates claim 12 (see discussion above).

Claim 13 depends from claim 12 and further requires that the cells are contacted with a single formulation comprising both the curcumin, curcumin analoque or derivative thereof and at least one NSAID. **Agarwal** teaches contacting cells with a single formulation comprising both curcumin and NSAID (see page 651, second ¶ on the right).

Claim 14 depends from claim 12 and further requires that the cells are contacted with a formulation comprising the curcumin, curcumin analogue or derivative thereof, followed by contacting with a second formulation containing said at least one NSAID.

Agarwal teaches contacting cells with a formulation comprising curcumin, followed by contacting with a second formulation containing NSAID (see page 651, top ¶ on the right).

Claim 15 depends from claim 12 and further requires that the cells are contacted with a formulation containing said at least one NSAID, followed by contacting with a second formulation comprising the curcumin, curcumin analoque or derivative thereof. **Agarwal** teaches contacting cells with a formulation comprising 75 µM NSAID and 25 µM or 50 µM curcumin (see page 651, bottom ¶ on the right).

The invention of claim 32 is drawn to a combination of two pharmaceutical compositions, comprising at least one NSAID drug selected from the group consisting of the list disclosed therein and curcumin, a curcumin analogue or derivative thereof, the combination being intended for treatment of an inflammatory, disorder or a cancer.

Regarding claim 32, the intended use of the composition comprising NSAID and curcumin for treatment of an inflammatory, disorder or a cancer, is an inherent property of the composition comprising NSAID and curcumin.

Since **Agarwal** teaches a combination of two pharmaceutical compositions, comprising at least one NSAID exemplified by sulindac sulfide and curcumin (see abstract), **Agarwal** anticipates claim 32.

Any properties exhibited by or benefits provided by the composition are inherent and are not given patentable weight over the prior art. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical

structure, the properties Applicants disclose and/or claim are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01.

Applicants are further requested to note that it is well settled that "intended use" of a composition or product, e.g., adhering to bone, will not further limit claims drawn to a composition or product. See, e.g., Ex parte Masham, 2 USPQ2d 1647 (1987) and In re Hack 114, USPQ 161.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-5, 9-15, 21, 23-24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Apoptosis*, **2003**, 8(6), 649-654 to **Agarwal**, in view of WO03007975 (published January 30, 2003) to **Babish et al** (hereinafter, "**Babish**", cited by the Applicants).

The limitation of claims 12-15 and 32, and the corresponding teachings of **Agarwal** are described above, and hereby incorporated into the instant rejection.

Although **Agarwal** teaches a combination therapy using NSAID and curcumin wherein therapeutic efficacy of the NSAID is achieved at otherwise lower doses due to the combination with the curcumin (i.e., synergy), **Agarwal** does not explicitly teach a method for treating an inflammatory disease or an inflammatory disorder or a cancer as required by the instant claim 1. Furthermore, **Agarwal** does not explicitly teach curcumin analogue or derivative thereof exemplified by demethoxycurcumin and bisdemethoxycurcumin, required by instant claim 5, which depends from claim 1.

Babish teaches synergistic compositions comprising curcuminoids and NSAID such as diterpene lactone species, known for their anti-inflammatory properties, (page 3, lines 18-25) for the treatment of inflammatory diseases such as arthritis (page 1, lines 30-34) and treatment of cancer such as colorectal cancer (page 2, lines 1-3). **Babish** further teaches the desire to discover compounds that can be administered together

such that they are synergistic and can be used at sufficiently low doses with no adverse side effects and wherein the COX-2 specificity is < 5-fold (page 3, lines 26-33,). Demethoxycurcumin and bisdemethoxycurcumin are disclosed as curcumins that are included in the invention (page 8, lines 15-17 and referenced claim 5). **Babish** teaches administration of the agents separately or together. For example, Tables 8 and 9 teaches administration of first compound (curcumin), second compound (NSAID) and the two components combined (tables 8 and 9, page 22).

Method claim 1 requires treating an inflammatory disease, an inflammatory disorder or a cancer. **Babish** teaches inflammatory diseases (page 1, lines 30-34) and cancer (page 2, lines 1-3).

Claim 3 depends from claim 1 and further requires that the drug is selected from the group consisting of the list disclosed therein. **Agarwal** teaches sulindac sulfide (see abstract).

Claim 4 depends from claim 1 and further requires that the drug is not celecoxib or derivatives, analogues, salts or prodrugs thereof. **Agarwal** teaches sulindac sulfide (see abstract). **Babish** does not teach not celecoxib or derivatives, analogues, salts or prodrugs thereof (see abstract).

Claim 5 depends from claim 1 and further requires that the curcumin, curcumin analogue or derivative thereof is a curcumin analogue or derivative selected from the group consisting of demethoxycurcumin and bisdemethoxycurcumin. **Babish** teaches demethoxycurcumin and bisdemethoxycurcumin (page 8, lines 15-17 and referenced claim 5).

Claim 9 depends from claim 1 and further requires that the curcumin and said NSAID are administered not within the same formulation. **Agarwal** teaches different µM formulation of NSAID and curcumin (see abstract and page 650 first ¶ on left). **Babish** teaches administration of the agents separately or together. For example, Tables 8 and 9 teaches administration of first compound (curcumin), second compound (NSAID) and the two components combined (tables 8 and 9, page 22).

Claim 10 depends from claim 1 and further requires that the NSAID is celecoxib, nimesulide, sulindac or sulindac sulfide or derivatives, analogues, salts or prodrugs thereof. **Agarwal** teaches sulindac sulfide, celecoxib derivative, sulindac derivative (see abstract).

Claim 11 depends from claim 1 and further requires that the NSAID is a drug other than celecoxib, or a drug other than sulindac, or a drug other than sulindac sulfide or derivatives, analogues, salts or prodrugs thereof. **Agarwal** teaches sulindac sulfide (see abstract). **Babish** teaches NSAID such as diterpene lactone species, known for their anti-inflammatory properties, (page 3 and lines 18-25).

Claim 21 depends from claim 1 and further requires that the cancer is colorectal or colon cancer. **Agarwal** teaches colon cancer (see abstract and page 649 first ¶ on left). **Babish** teaches colon cancer (page 2, lines 1-3).

Claim 23 depends from claim 1 and further requires that the inflammatory disease or inflammatory disorder is selected from the group consisting of the list disclosed therein. **Babish** teaches arthritis (page 1, lines 31-34).

Claim 24 depends from claim 23 and further requires that the inflammatory disease or disorder is arthritis. **Babish** teaches arthritis (page 1, lines 31-34).

Therefore, one of ordinary skill in the art would have had a reasonable expectation of success in arriving at the invention as claimed because each component in the claimed composition is taught by **Agarwal** and **Babish** useful as anti-inflammatory or anticancer agent(s) and combining them will yield the predictable result of treating inflammatory disease(s) or a cancer.

MPEP §2144.06 states "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art."

Lastly, the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983). The Applicants disclose and claim that the composition comprising curcumin and NSAID is to be administered so as to treat inflammatory disease(s) or disorder(s) or a cancer. **Agarwal** and **Babish** teach the same use of their compositions (see discussion above).

Thus the claims fail to patentably distinguish over the state of the art as represented by the cited references. Therefore, the invention as a whole was *prima facie* obvious at the time it was made.

Claim Rejections - 35 USC § 103

Claims 1, 3-5, 9-15, 21, 23-25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Apoptosis*, **2003**, 8(6), 649-654 to **Agarwal**, in view of WO03007975 (published January 30, 2003) to **Babish** and further view of US Pub. No. 20010044410 (published November 22, 2001) to **Gelber et al** (hereinafter, "**Gelber**", cited by the Applicants).

The limitation of claims 1, 3-5, 9-15, 21, 23-24 and 32, and the corresponding teachings of **Agarwal** and **Babish** are described above, and hereby incorporated into the instant rejection.

Agarwal and **Babish** did not explicitly teach the requirement of claim 25.

Gelber teaches a medicinal composition comprising an effective amount of NSAID such as sulindac and an effective amount of nutriceutical exemplified by curcumin and useful for treating inflammatory disease(s) exemplified by arthritis. **Gelber** further teaches that the combination, which when administered to a person in need thereof have the effect of increasing the beneficial effects of the pharmaceutical utilized. See ¶s 0002, 0006-0010, 0012-0013, 0051, 0065-0066

Claim 25 depends from claim 1 and further requires administering one or more additional active ingredients, selected from antibiotics, conventional anti-cancer and anti-inflammatory agents. **Gelber** teaches a composition comprising a NSAID (see claim 3) and an anti-inflammatory nutriceutical such as curcumin (see claim 9) and further comprising carriers (paragraph 68) and other agents that are suitable for

combination therapy, such as Goldenseal (paragraph 30) which is an immune booster with antibiotic activity.

Therefore, one of ordinary skill in the art would have had a reasonable expectation of success in arriving at the invention as claimed because each component in the claimed composition is taught by **Agarwal**, **Babish** and **Gelber** useful as anti-inflammatory or anticancer agent(s) and combining them will yield the predictable result of treating inflammatory disease(s) or a cancer.

MPEP §2144.06 states "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art."

Lastly, the strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983). The Applicants disclose and claim that the composition comprising curcumin and NSAID is to be administered so as to treat inflammatory disease(s) or disorder(s) or a cancer. **Agarwal**, **Babish** and **Gelber** teach the same use of their compositions (see discussion above).

Thus the claims fail to patentably distinguish over the state of the art as represented by the cited references. Therefore, the invention as a whole was *prima facie* obvious at the time it was made.

Additional Prior Arts

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure:

Torrance et al, (Nature Medicine, **2000**, 6(8), 1024-1028) has disclosed a method of inhibiting intestinal neoplasia comprising administering a combination of (i) NSAID exemplified by sulindac and (ii) an EGFR kinase inhibitor, wherein the combination allows lower dose of sulindac to be used, thus potentially bypassing the toxic problem associated with long term NSAID treatment.

Karutla et al (Biochimica Biophisica Acta, **1994**, 1224, 597-600) has disclosed curcumin as an EGFR kinase inhibitor.

Conclusions

No claim is allowable.

If Applicants should amend the claims, a complete and responsive reply will clearly identify where support can be found in the disclosure for each amendment. Applicants should point to the page and line numbers of the application corresponding to each amendment, and provide any statements that might help to identify support for the claimed invention (e.g., if the amendment is not supported in *ipsis verbis,* clarification on the record may be helpful). Should the Applicants present new claims, Applicants should clearly identify where support can be found in the disclosure.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IBRAHIM D. BORI whose telephone number is (571)270-7020. The examiner can normally be reached on Monday through Friday 8:00AM-5:00PM(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JEFFREY S. LUNDGREN can be reached on 571-272-5541. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IBRAHIM D BORI/
Examiner, Art Unit 1629

/Jeffrey S. Lundgren/

Supervisory Patent Examiner, Art Unit 1629